

Fig. 1

A "D" ODNs require an unmethylated CpG

1		G G T G	C A T C	A T G C A G G G G G G
2		- - -	- - -	- - - - -
3		- - -	- - -	- - - - -
4		- - -	- - -	- - - - -
5		- - -	- - -	- - - - -
6		- - -	- - -	- - - - -
7		G G T G	C A C C	G G T G C A G G G G G
8		- - -	- - -	- - - - -

B "D" ODNs require a phosphodiester backbone.

1	GGTG	CAT	<u>CGA</u>	TGC	AGGGGGG
2	-	-	<u>-</u>	-	-
3	-	-	<u>-</u>	-	-
4	-	-	<u>-</u>	-	-
5	-	-	-	-	-

C Optimal "D" motif: palindromic Pu Py CG Pu Py

[illegible]

D Minimum size of immunostimulatory D ODN

1	(22)	G G G G T G C A T C G A T G C A G G G G G G
2	(20)	- -
3	(18)	- -
4	(16)	- . G - G - - - - - - - G G - - - - -
5	(13)	- - G - - - - - - A - - - - - - - - -

E "D" ODN require a pallindromic far flanking region

1 G G T G C A T C G A T G C A G G G G G G
2 - - - C* G T : - A C* - - - - -
3 - - - (G) A - - - A T - - - - -
4 - - - C - - - (A) (G) - - - - -

F Poly-G strings improves the activity of "D" ODNs

1	GGT	G	C	A	T	C	G	A	T	G	C	A	G	G	G	G	G	G
2	AA	-	-	-	-	-	-	-	-	-	-	-	G	G	G	G	G	G
3													G	G	G	G	G	G
4	GG	-	-	-	-	-	-	-	-	-	-	-	G	G	G	G		
5	GG	-	-	-	-	-	-	-	-	-	-	-	A	A	A	A	A	A
6	AA	-	-	-	-	-	-	-	-	-	-	-	A	A	A	A	A	A
7	GGT	G	C	A	C	C	G	G	T	G	C	A	G	G	G	G	G	G
8													A	A	A	A	A	A

Stimulation index (IFN γ)

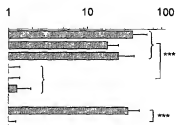
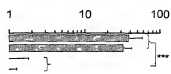
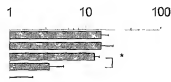
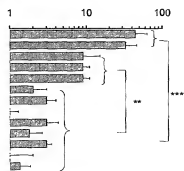
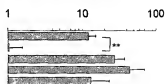
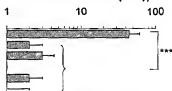


Fig. 2

TWO TYPES OF CpG ODN ELICIT DISTINCT RESPONSES FROM HUMAN PBMC

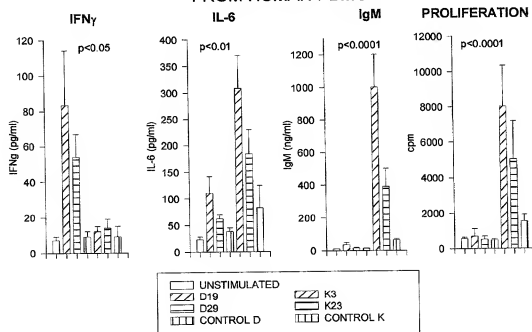


Fig. 3

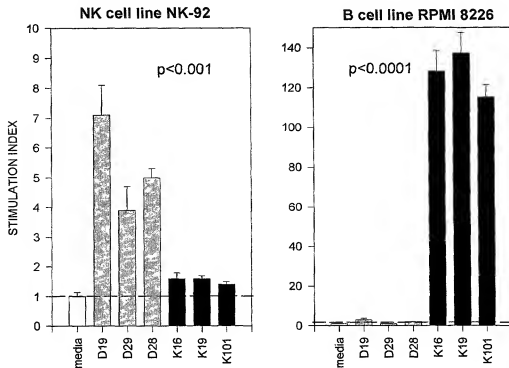


FIG. 4A

Human PBMC

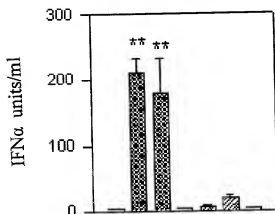


FIG. 4B

Rhesus PBMC

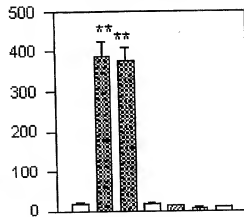


FIG. 4C

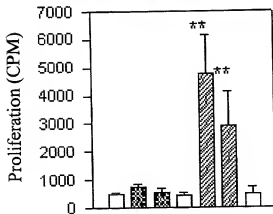


FIG. 4D

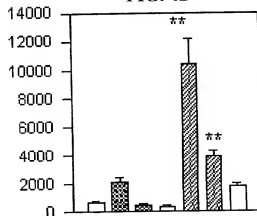


FIG. 4E

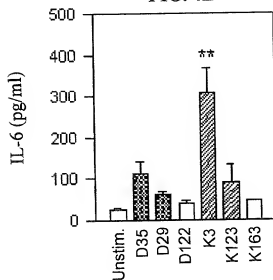


FIG. 4F

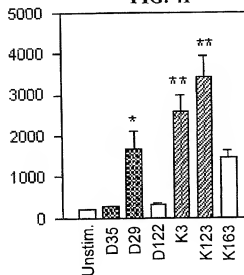


FIG. 5A

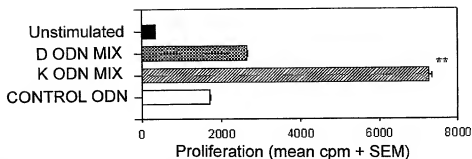


FIG. 5B

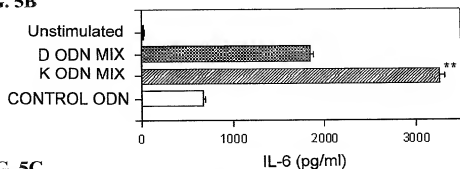
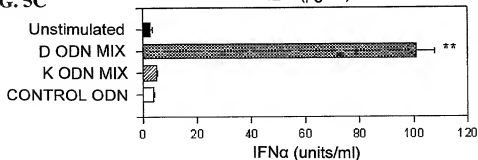


FIG. 5C



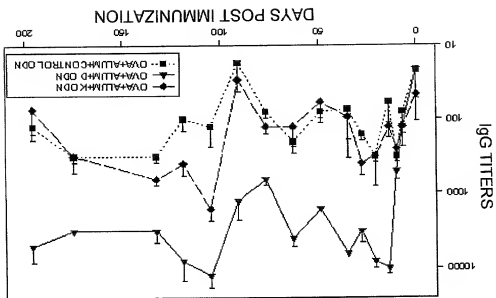


FIG. 6

FIG. 7

